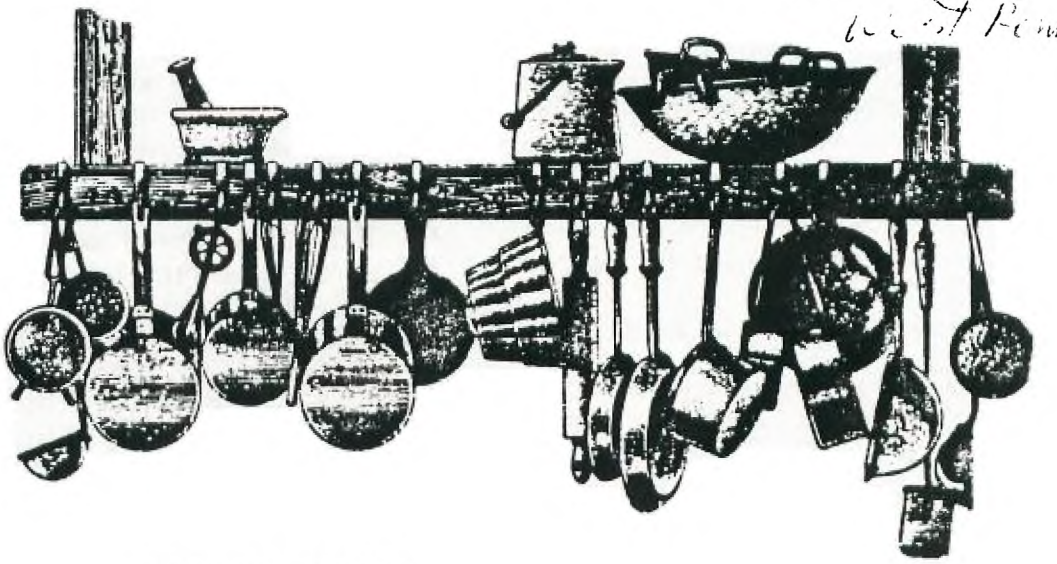
West Penn '99'ers Got Something Cooking!

ISSUE #4 APRIL 1988



FOR THE RECORD

by Ed Bittner
Recording Secretary

March came in like a lion and went out like a lamb but on the 15th of March, it was all TIger, West Penn 99ers style. With prompting, > President Scott Coleman opened the meeting at 7:10. He immediately called attention to the free copies of Byte Magazine, the Newsletter library, and the availability of programs from the LA users group, whose catalog is on disk and available in our library. The treasurers report was glowing again as membership renewals continue to trickle in (Those not in by now will not get a chance to read this newsletter so they won't know what their missing.) The executive committee was asked to convene again to discuss insurance (This time, Pres. Coleman was there to stifle the crowd).

The postage question should be laid to rest, howeverrrrrr, a substantial commitment of time and energy would be necessary by some volunteer to care for presorting, etc,etc. (personal feeling ((editorial license)) J.Willforth does much much much more than enough and each time this issue surfaces, I believe that he may feel pressure. Ease up people, (or volunteer.)

We now have a current updated users group list. Scott also announced the New Jersey TI faire and attempted to recruit people.(March 26) . Discussion then centered around a rumor that TI was bringing out a new personal computer. John Willforth then took over with demonstrations and handouts. Gramcracker/Gramulator, TI Writer Manual (Harry Brashear), Funnelweb Docs, and diskette calendars were presented in rapid Willforth fire. Supercart and software were also discussed and a demo of SargonII/Music Program went well.

The raffle , Supercart, was worthwhile and Eric Zeno announced his willingness to help all with library needs. Keep up the good work Eric.

Positively submitted,
Scoops Bittner

THE KINDOF DULL PAGE, BUT DON'T SKIP IT BECAUSE THERE IS A SUPRISE HIDDEN WITHIN THE LINES ON THIS PAGE. READ IT ALL, THINK ABOUT IT AND LET ME KNOW WHAT IT WAS AT THE NEXT MEETING ON **APRIL 19TH.** AT THE PRESBYTERIAN CHURCH OF THE COVENANT, 4TH AND OAK, IRWIN PA. THE MEETING WILL BEGIN AT EXACTLY (APPX.) 7:00PM. THERE WILL BE DEMONSTRATIONS FOLLOWING THE BUSINESS MEETING AND SOME SPECIAL INTEREST CLASSES. SEE YOU THERE!

TREASURER'S REPORT FOR MARCH - 1988

FROM JAN TRAYERS

3/15	CASH ON HAND	$ 70.95
3/15	LIBRARY SALES	42.40
"	MICROPENDIUMS	39.75
	DUES	40.00
	DISK SALES	100.00
	RAFFLE	20.00
	DATA CASES	60.00
	TOTAL	$373.10
3/30	DEPOSIT	-323.10
	CASH ON HAND	$ 50.00
3/15	BANK BALANCE	$1049.88
3/15	SUPPLIES FOR LIBRARY	- 10.00
		1039.88
3/24	MICROPENDIUM	- 33.00
		1006.88
3/24	POSTAGE	- 94.24
		$ 912.64
"	20 COPIES OF "THE WRITERS"	- 34.00
		878.64
3/30	DEPOSIT	+ 323.10
	BALANCE	$1201.74
	TOTAL CASH BALANCE	$1251.74

THE SOUTHWEST NINTEY-NINERS OF P.O. BOX 17831 TUCSON, AZ 85730 HAS MADE A VERY NICE SHEET OF OVER LAYS CONSISTING OF ONE EACH FOR THE TE-II, E/A BASIC, T.I.-WRITER, AND MULTI-PLAN. YOURS MAY HAVE BEEN LOST, DAMAGED, OR YOU MAY NOT HAVE RECEIVED ONE WHEN YOU ACQUIRED YOUR CONSOLE OR CARTRIDGE. THE FIVE HAVE A PLASTIC LAMINATE ON THESE ENHANCED OVERLAYS. WE WILL HAVE ONE AT THE MEETING, AND PERHAPS A LARGE ORDER CAN BE MADE FOR THE GROUP AT THE TIME. $3. FOR SINGLE SHEETS, FIVE SHEETS FOR $10.

ASGARD SOFTWARE HAS RELEASED A NEW PROGRAM THAT GIVES THE PERSON WHO KEEPS TRACK OF THEIR SCHEDULE OR WOULD LIKE TO SEE GRAPHICALLY UPCOMING EVENTS OF INTEREST A GREAT TOOL. CALENDAR MAKER 99 ALLOWS DESIGNING A VERY CUSTOM CALENDAR.

CALENDAR MAKER 99 OPERATES ON THE TI-99/4A AND IS FULLY COMPATIBLE WITH THE GENEVE (9640), AND IS SO EASY TO USE THAT "EVEN AN ADULT CAN USE IT!" CM99 LETS YOU CREATE A CALENDAR FOR A MONTH OR YEAR AND LETS YOU PUT SMALL PICTURES OR NOTES ON EACH DAY OF THE MONTH.CM99 WILL PRINT MONTH CALENDARS WITH OR WITHOUT A HALF-PAGE PICTURE AND A 3-13 LINE MESSAGE SO THE STYLE AND SHAPE OF EACH CALENDAR MADE, WILL HAVE YOUR PERSONAL TOUCH. THE GRAPHICS ARE TI-ARTIST INSTANCES ON THE DAYS,AND A COMPLETE LIBRARY OF SMALL PICTURES, TYPEFACES, BORDERS ARE INCLUDED.

EXTENSIVE DOCUMENTATION AND EXAMPLE FILES INCLUDED.
TO ORDER WRITE OR CALL : ASGARD SOFTWARE
P.O. BOX 10306
(301) 559-2429 ROCKVILLE, MD 20850
$19.95 + $.75 S/H
REQUIRES 32K, TI XBASIC, EPSON COMPATIBLE PRINTER AND A DISK SYSTEM. PICASSO USEFUL.

WANTED -P-CODE CARD FOR THE TI-99/4A. CONTACT ROB EKL AT (412) 864-1233

FOR SALE (1) BLACK/SILVER CONSOLE WITH SPEECH AND ALL MANUALS. $70.00
(1) BLACK/SILVER CONSOLE W/MANUALS EXC. CONDITION. $45.00
CONTACT FRANK FOSTER (412) 238-7532

DELIVERIES ARE NOW BEING MADE ON THE NEW MYARC WINCHESTER DISK CONTROLLER FOR THE 99/4A AND 9640. THE CONTROLLER WILL SUPPORT ALL DENSITIES OF FLOPPY AND UP TO THREE 140+ MEG. WINCHESTER DRIVES. THE HARDWARE IS ON-BOARD TO SUPPORT CARTRIDGE TAPE, BUT IS NON-FUNCTIONAL AT THIS TIME. PRICE $325. WHICH MAY SEEM PRETTY STEEP TO SOME OF YOU, BUT FOR THOSE WHO BOUGHT EARLY TI DISK HARDWARE FOR THEIR 99/4S AND 4AS THIS IS A STEAL. YOU WILL HAVE THE CAPACITY OF NEARLY 1,600 FLOPPYS ON LINE AND ACCESSABLE IF YOU MAXIMIZE THE SYSTEM. YOU WILL ALSO BEABLE TO GO TO THE QUAD-DENSITY FLOPPIES WHICH ARE EQUIVALENT TO 13 OF THE 90K DRIVES, AND THE COST OF THESE DRIVES ARE UNDER $100. EACH! YOU CAN KEEP ONE OF THE MORE CONVENTIONAL TI DRIVES, SSSD, DSSD, DSDD AS A MEANS TO INPUT/OUTPUT SOFTWARE FROM/TO OTHER TI SYSTEMS. CONTACT YOUR MYARC DEALER TO GET MORE DETAILS AND ORDERING INFORMATION. TO FIND OUT WHERE YOUR NEAREST DEALER IS LOCATED CONTACT MYARC AT (201) 766-1700

"TIPS FOR BEGINNERS"

-BY FRANK N. ZIC-

Here we go together-No. 14. What I would like to cover in this article is another of the harder to get started with programs, "The Printer's Apprentice". I know it would take a half dozen or so articles to even start to unravel the complexities of this hard to follow program, but what I hope to accomplish is simply to list a few of the main commands, without details,and then present a bare bones, step by step, listing of commands that will allow us to immediately use the basic Character Editor to print out various print styles and sizes of lettering. A simplified update on the program is available to all original purchasers, details are listed in the May 1987 edition of "Computer Shopper" in the TI-Forum article on page 141.

The program itself is written in FORTH and therefore is fast in execution, but the instructions are written in a hard to follow style that can easily discourage all but the ardent hacker type. In order for a program to be flexible it is necessary for it to provide many options. Indeed this freedom is provided and with careful reading and experimenting one would become adept. When viewing the command lines, place an immaginary comma between each word to more easily see each word. The disk sectors are completely filled and this helpful comma separation could not be accomplished. To select a command it is necessary only to enter the capitol letter.

The disk is composed of four main parts: Character Editor, Picture Editor, Formater and Scheduler. A brief discription of each follows:

*** Character Editor- Modifies two types of print fonts: SDSH(Single-Strike) and OUSH(Over-Under Strike). Several variations are presented and each can be Edited as to characteristic, size and spacing.

*** Picture Editor- Create or Edit any "_P" style picture presented in the (25 Program) format. These pictures can be taken from the "TPA" disk itself, created with your own editing or taken from TI-Artist. Operating functions include: Sizing, Klipping and Flipping as well as Printing.

*** Formatter- Takes text you typed in Editor mode, allows handling of it with the internal Mini-Word processor called "Jotter". It can then be formatted and printed. Completed files can be stored on disk by the External function and used later by the Scheduler.

*** Scheduler- Combines text(written material) and pictures to make up a composite page. Place each piece of information on the sheet where you want it and in the size you want for a finished product. Save and use over & over. Good for letter heads, return address labels and calling cards,etc.

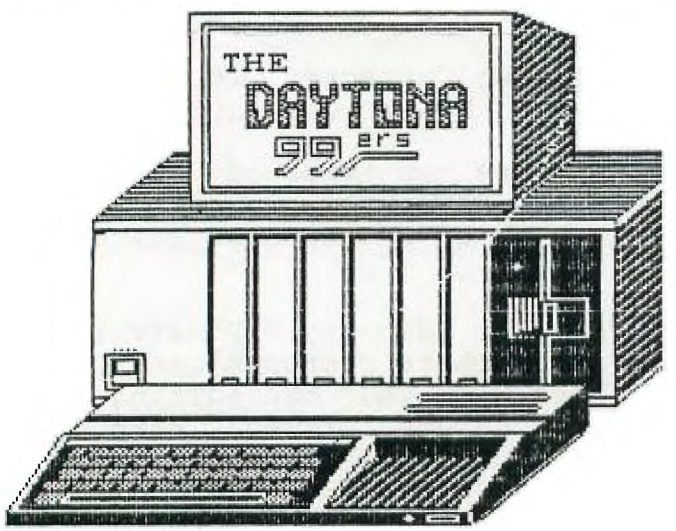
(continued on the next page)

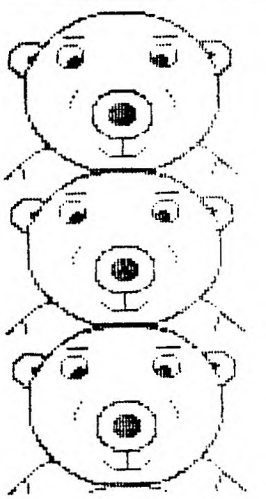
continued from "TIPS FOR BEGINNERS" (No.14)

When operating in the Picture Editor mode, you are asked to place the arrows around your created picture. Be sure to place them completely around the outer border, just as a frame would fit around a picture, otherwise you will clip off a part of your picture.

A list of the Character Editor functions are listed on p7 and the choices for the Variable commands are on p17. You might mark the more important ones with a high-lighter marker for ease of reference. Page 27 offers a performance sequence, with Script II being added directly behind Script I as though they were one continuous list. Following these next instructions should permit you to print out your messages without any hang-ups. Start with the autoload screen. Each place you see a coma, hit Enter: 1,S,S,D,F,(Flip TPA disk) Dsk1.BAUHAUS,X,E, CTRL/9,P,,, R,CTRL/R, FCTN/9,P,P,PIO.CR, (or your printer symbol) V,G,(for Gemini or replace G with E for Epson) S,479,(959 for OUSH style) 4,2,N,S,(Enter your message) (Turn printer on) G,B.

The following examples were either created with "The Printer's Apprentice" or copied from its files. The picture of the computer was taken from Ti-Artist. I hope that these examples help stimulate some interest to try the program. Oh! come on, give it a whirl,it really can be fun. Aren't the Teddy's cute?





TREASURE

MRS. ELEANOR M. ZIC
818 EVERGLADE DRIVE
McKEESPORT, PA. 15135

May the good 4's be with you.

LET'S TALK RAM DISKS PART V
By John F. Willforth (April 1988)

The MEMORY PLUS card from CORCOMP appeared on the market almost two years ago, and to date I have not seen one. I therefore was hesitant to write this article. I had to depend on an article by Scott Darling as well as information provided by Willis Richardson and the technical support at CORCOMP. I hope that it will be complete and accurate enough to merrit your consideration. I have tried to be as objective as possible on all the Ram Disks reviewed.

The MEMORY PLUS comes in both a PEB unit and a stand alone unit. The stand alone unit is more flexable in that it can be used in conjunction with your 32K expansion memory, while the PEB version cannot. They both come in 256K as well as 512K sizes, again the stand alone can be configured with an added unit (two 512K units for example) and the PEB version cannot. Both units are supported by a 9V. power supply to the ram disk card to support memory when a system is powered down normally. If a total failure of the AC occurs, you will lose all files on the MEMORY PLUS. This is a common failure of any Dynamic Ram based RAM DISK.

The MEMORY PLUS comes with the Disk Manager resident on the card, this is good for two reasons, one is that you don't have to load it from a diskette, and two, it is the only one that gives you full use of the disk. The manager is called with "CALL RAMGR" for units with the newest PROM installed V. 3.1 or "CALL RMGR" with lower versions, a good way to tell what PROM you have in your MEMORY PLUS. The disk manager can initialize the disk, handle all disk and file functions as well as test the entire ram disk memory. The manager is very similar to the disk manager that comes with the Corcomp disk controller. It has some nice features, among them pressing a "T" when selecting to copy a file that is protected, will Temporarily unprotect that file until the file has been copied. The resident disk manager will also work with other disk units in the system. A total of 2048 sectors is the default for a 512K and 1920 will be the limit if you wish for the 32K expansion memory to reside in this unit (required on a PEB only set-up).

A major draw back with the ram disk is in the fact that the entire disk is called as one volume. In other words if you intend to use "TIMP" for MultiPlan, that is the only name that can be used for that entire unit. You will have to take this into consideration if you are a user of software that is dependent on specific volume (disk) names. Many of the other ram disks do allow for multiple volume names within a single ram disk unit.

The MEMORY PLUS, according to Scott, is able to work in the system with a different ram disk present. This could be a saving grace to compensate for it not accepting more volume names. You will have to set up CRU addresses for your card, which by the way are >1000 and >1400 for the MEMORY PLUS.

The drive number can be set with the disk manager or under basic using a DELETE "SDx", where x is the drive # selected.

A lowercase with desenders is available for use by basic/xbasic simply by using a DELETE "LOWER".

There is a switch on the MEMORY PLUS which is of course located at the rear of the card (but has pins available for a remote connection) whose purpose is to assure an orderly power down of the PEB without glitching the ram disk and this switch should be used each time the PEB is powered down. A switch over of clock and flag settings will be done if this switch is pressed . I think this is a bothersome drawback.

I spoke of the Prom V. 3.1 which is available. Corcomp has corrected some problems such as a density identification problem in sector 0, and added the ability to catalog the disks to a serial, parallel port or to a disk.

The stand alone units are built by Corcomp as ordered, and any pricing should be checked with your CORCOMP dealer. CORCOMP has a good attitude of support for their products. Call them at (714) 630-2903 or write: CorComp Inc., 2211-G East Winston Road, Anaheim, CA 92807

By the way if you are still under a warranty CORCOMP will send you a new Prom and if your warranty has expired $15 will update your MEMORY PLUS. I have used all the space available this month, so check back next month for a review of the GRAND RAM. (Hopefully).

PASCAL/p-CODE PART 5
Stan Katzman

This time I would like to discuss a few (not all) of the commands used to edit text in the Editor.

X(change. If we see a mistake in our text enter Control C and then put the cursor directly over the error and press "X". When you type the corrections will exchange for the characters on the screen. To make the changes permanent press Control C. If you decide that you do not want the changes made permanent press Control (.) period and the original will return.

D(elete. If you want to remove some text enter Control C, position the cursor over the start of the material to be deleted and press "D". Move the cursor with the cursor keys and the material will be removed. To make the deletions permanent press Control C. If you want to remove entire lines press "D" and then Function 9. Move the cursor downward with the cursor key (Function X) until all the material you want removed is gone. Again, to make the deletion permanent press Control C (to retrieve the "removed" material press Control (.)).

P(age. If you have more text than will fit on one screen and you want to search the text we can use the Page command. Enter Control C and then press "P", the screen will move 24 lines at a time. Look at the upper left hand corner of the screen and you will see an arrow (< or >), the default "position" of the arrow is (>). If the arrow is pointing to the right when you press "P" you will move downward through your text. To change the arrow press the appropiate arrow key (shift comma or shift period). If you have a really large text you can press a number like 2 or 3 and then when you press "P" you will move 2 or 3-24 line blocks at a time.

You can also move through text by using the F(ind and J(ump commands. I have not used these but I want you to know of their existence. The commands that I have described here are the ones that I use and I have been able to get along very nicely in the Editor.

THE GRAMULATOR (UPDATE).....

MARK VAN COPPENOLLE HAS COMPLETED AND IS MANUFACTURING THE GRAMULATOR FOR SALE AS A COMPLETELY ASSEMBLED UNIT FOR $180. BY CHECK OR MONEY ORDERS ONLY MADE OUT TO CADD ELECTRONICS 52 AUDUBON ROAD, HAVERHILL, MA 01830 (617) 327-0336 AFTER 6:30 PM E.S.T.. THE MBX OPTION IS AVAILABLE FOR $50. ADDITIONALLY. ALLOW 8-10 WEEKS. FEATURES INCLUDE SIMULATING 64K OF GRAM AND 16K OF RAM (IN TWO 8K BANKS AT 6000-7FFF) AND AS AN OPTION, 32K OF RAM (IN FOUR 8K BANKS AT 6000- 7FFF) FOR THE MILTON BRADLEY EXPANSION (MBX) CARTRIDGES.

1) YOU CAN CUSTOMIZE TI OS IN GOM 0 AND TI BASIC IN GROMS 1 AND 2.
2) BACKUP GROM AND ROM CARTRIDGES TO DISK. (MBX IF OPTION PRESENT)
3) ACTS AS "SUPER SPACE " CART. AT 6000- 7FFF.
4) ALLOWS CUSTOMIZED GROM 0,1 AND 3 WITH CART. IN SLOT.
5) ALL CARTRIDGE FILES CREATED AND LOADED BY THE GRAMULATOR ARE COMPATIBLE WITH 9640 AND MG GK.
6) CAPABLE OF LOADING USER WRITTEN GPL CODE.
7) A TOTAL OF 96K (80K AVAILABLE FOR -- USE WITHOUT MBX OPTION) OF MEMORY BATTERY BACKED.
8) BATTERY LOCATED OUTSIDE CASE FOR EASY REPLACEMENT.
9) ALL LOADING AND SAVING OF CARTRIDGE FILES IS SOFTWARE CONTROLLED FOR THE NOVICE.

SEE WHY I PUT MARKS NAME ADDRESS PHONE NUMBER AND ORDERING INFO FIRST. (NO SPACE LEFT)

BYPASSING THE 16 BIT BUS WAIT STATE DEFEAT

The following modification is for people who have added 32K of expansion RAM on the 16 bit bus in their consoles and would like the option of using that memory at regular speed. Since this modification only replaces the wait state eliminated by the conversion without defeating the multiplexing of the data lines, there is no need for an external memory expansion. The reason for making this modification is that it allows you to run those programs that are incompatible with the increased speed without having to swap consoles and add an external 32K to the system. The instructions given here are for consoles modified using Mike Ballmann's method as described by John Clulow.

You'll need one single-pole single-throw (SPST) toggle switch, one 74LS08 quad AND gate, a small knife, a couple of feet of wire-wrap wire, and soldering equipment. Be sure that the switch you use is NOT a center-off type. It should only have two positions. If you have modified your own console, you probably have all but the switch and 74LS08 on hand.

1) First, locate the 74LS153 that is stacked on top of the 74LS194 (U613). From pin 9 of the 74LS153, there should be a wire going to pin 13 of a 74LS32 (U605). Remove this wire.

2) Find a convenient place to mount the switch in the console. I've found that mounting the switch on the main board makes disassembly of the console easier and lessens the chances of breaking a connection. In one console, I have it mounted on the empty space right next to the screw nearest the power supply board. In another, I have mounted it at the back of the board near the center where a 1/2" hole exists in the board. A notch is cut in the case to allow the handle of the switch to stick through and the switch is affixed to the board with 5-Minute epoxy.

3) Use the wire-wrap wire to connect the center terminal on the switch to pin 13 of the 74LS32 where you removed the wire. Connect one of the outer terminals on the switch to pin 11 of the 74LS00 (U606) next to the 74LS32 (there should also be another added wire to that same pin). Connect the other terminal on the switch to pin 9 on the added 74LS153 that you removed the wire from.

4) On the 74LS08, cut off pins 1, 2, 3, 4, 5, 6, 11, 12, and 13. Bend out pins 8 and 10. Next, locate U602 (a 74LS04). You'll find it at the end of the 9900 opposite of the RAM that was added earlier to the top of the console ROM. Place the 74LS08 on top of U602 with the notched ends lined up. Solder pins 7, 9, and 14 of the 74LS08 to the corresponding pins of U602 below it.

5) Solder a piece of wire-wrap wire from pin 8 of the piggy-backed 74LS08 to pin 5 of U603 (a 74LS00). U603 is near the center of the board near another 74LS00. It is the one nearest the keyboard connector. Solder a wire from pin 10 of the 74LS08 to pin 2 of the 74LS153 (on top of U613).

6) On the underside of the circuit board, locate pin 9 of U602 (the 74LS04 you just stacked the chip on) and solder a

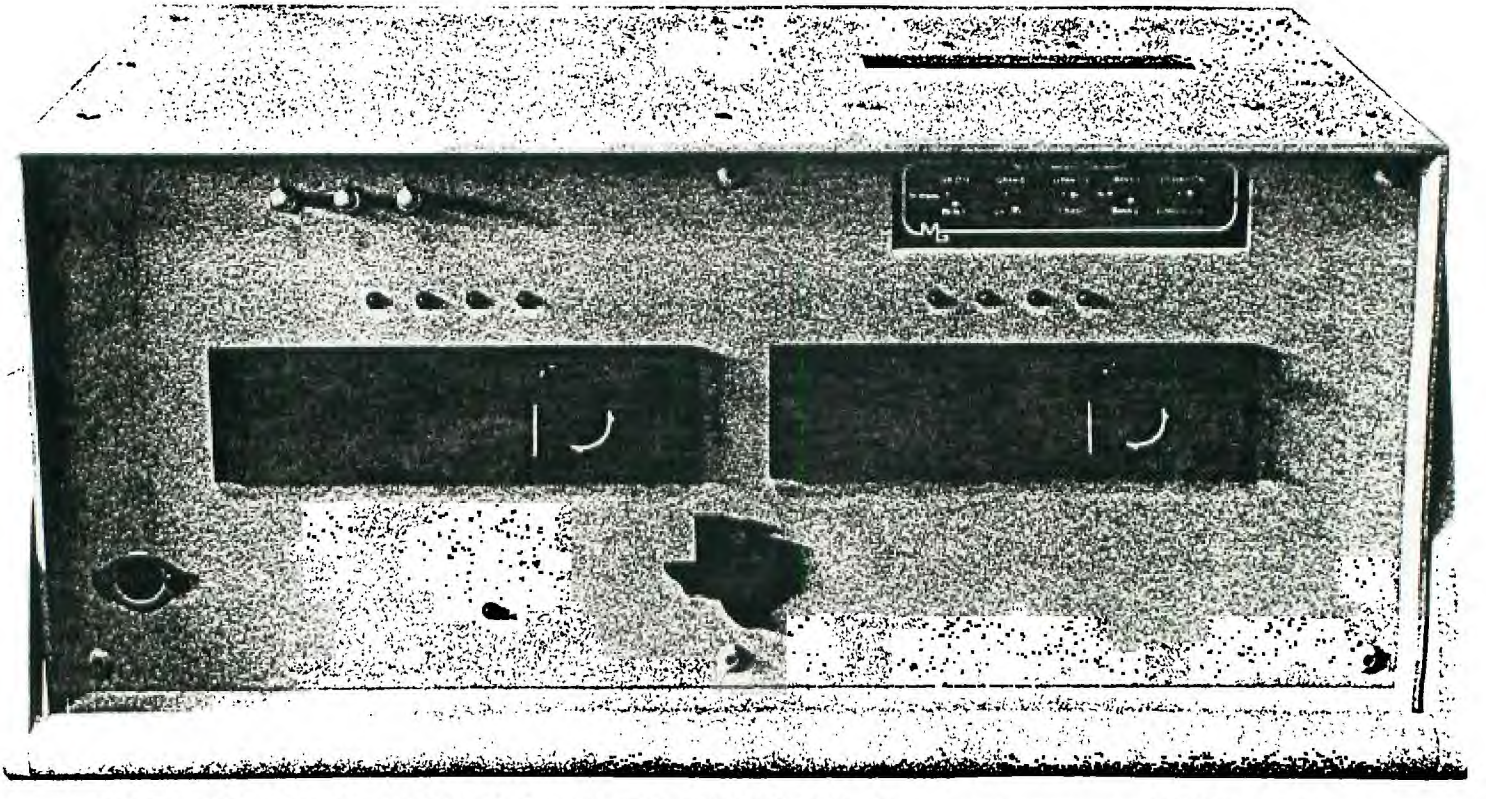
wire from that pin to pin 13 of of U613. This is done on the bottom of the board because both chips involved have other chips stacked on top of them. Remember to start counting pins from the other side since you are looking at the bottom of the board.

7) On the bottom of the board, locate the circuit trace going from pin 9 of U602 to pin 5 of U603. Double-check your pin numbering. Make two cuts across the trace about 1/16 of an inch apart and remove the trace between the cuts.

8) On the top of the board, locate the trace going from pin 4 of U606 (the 74LS00 next to U603) towards the piggy-backed 74LS153. Cut the trace near the chip using the same method as above.

Double check all connections. Also look over the board carefully for loose pieces of solder or wire that may be lying on the board as these can cause short circuits and destroy your console, then re-assemble before testing. If you've done everything right, one position on the switch will allow use of the fast internal memory, and the other will use the internal memory at regular speed.

John Guion
DTIHCG



COULD THIS BE THE NEW RUMORED TI HOME COMPUTER? FEATURES INCLUDE DSDD CONTROLLER HORIZON RAM DISK, TWO 1/2 HT. DSDD DISK DRIVES, RS232 AND PIO PORT, 32K, MILLERS GRAPHICS GRAMKRACKER, ML SYSTEMS INTERFACE FOR IBM KEYBOARD, AND MUCH MORE, BUILT IN! WEST PENN 99'ERS WOULD LIKE TO THANK ROB AND JOE EKL FOR BRINGING THIS AMAZING MACHINE TO OUR MEETINGS. IT IS APPRECIATED.

PRESS RELEASE

TI INTERNATIONAL USERS NETWORK
TI NET

The Texas Instruments International Users Network (TI NET) has announced a special online sign up offer for all members of the TI Community. TI NET is a service of General Videotex Corporation, better known as Delphi. To introduce you to the finest telecommunications network and TI Sig, Delphi has set up an immediate online membership registration.

TI NET Users can now save $20.00 when they join Delphi. As a special offer to the TI community you can join TI NET tonight for $29.95. That's $20.00 off the regular price. The membership package includes a copy of Simon & Schuster's newly released, 500 page "Delphi: The Official Guide" (retail $19.95), a handy command card, and a credit for one hour of use at Delphi's low standard connect rates.

With Delphi's no risk policy, the membership can be cancelled and the handbook returned within 30 days of the date the account was established, and Delphi will return the membership fee. Billing is only for the time used in excess of the initial one hour credit.

Some items of interest in the TI NET include:

Representatives from all the major online services participated in a landmark conference held in December, 1987. The purpose was to determine a standard protocol for the compression and archiving of files for the 99/4A and the Geneve 9640. TI NET took the lead in setting this standard.

Ever wish you received your money from Fairware programs? TI NET now makes that possible with surcharge software. This special service allows you to collect the money you rightfully deserve. This feature is not available on any other TI SIG.

The TI NET Shopping area brings you the best in 99/4A and 9640 software and hardware. Order from quality vendors like Disk Only Software, ASGARD, Genial Computerware, Horizon RAM Disk, MICROpendium magazine and more. This feature is not available on any other TI SIG.

The Great Software contest is currently underway with the entries due by August 1, 1988.

Standard Delphi usage rates include all communication charges and there are no premium charges for access at 1200 or 2400 bps! Home time is weekday evenings from 6:00 PM until 7:00 am, and all day weekends with a basic rate of $0.12 per minute or $7.20 per hour.

To sign up online to Delphi and TI NET --
Dial 800-365-4636 or 617-576-2981.
Once connected, press return twice.
At PASSWORD prompt, type TINET and press return.
A brief tour of Delphi and prompts for the information needed to establish a Delphi billing account will appear. Delphi memberships can be charged to Visa, MasterCard or American Express.

Delphi is accessible via Tymnet and Telenet in the U.S. In Canada Delphi is accessible via Datapac and Tymnet in major cities.

XXX

Contact: Jeff Guide, System Manager, TI NET, P.O. Box 244, Lorton, VA 22079.

DUES FOR MEMBERSHIP IN THE WEST PENN 99'ERS ARE $15. FULL FAMILY MEMBERSHIP, AND $10. FOR AN ASSOCIATE MEMBERSHIP (NEWSLETTER ONLY). MEETINGS ARE HELD THE THIRD TUESDAY OF EACH MONTH AT THE UNITED PRESBYTERIAN CHURCH OF THE COVENANT, ON THE CORNER OF 4TH AND OAK STREETS IN IRWIN PA. FOR MORE INFORMATION CALL ANY OF THE CLUB OFFICERS LISTED BELOW:

PRES.	SCOTT COLEMAN	(412) 271-6283	V.PRES.	MICKEY SCHMITT	(412) 335-0163
REC. SEC	ED BITTNER	(412) 864-4924	COR. SEC	GENE KELLY	(412) 829-0469
TREAS.	JAN TRAYERS	(412) 863-1575	LIBRARY	ERIC ZENO	(412) 371-4779
EDITOR	JOHN WILLFORTH	(412) 527-6656			

A REVISED SCHEMATIC OF THE CLOCK/CALENDAR/ANALOG-TO-DIGITAL DESIGNED AND GIVEN TO THE TI COMMUNITY AS A PUBLIC DOMAIN CIRCUIT IS NOW AVAILABLE FOR THE PROTO BOARD. CONTACT SCOTT COLEMAN OR MYSELF (JOHN WILLFORTH) FOR MORE INFORMATION ON THE BOARD OR ANY CIRCUITS NOW AVAILABLE FOR THE BOARD. THE CUIRCUIT JUST MENTIONED HAS BECOME KNOWN AS THE MBP BOARD. THERE IS SOME SOFTWARE AVAILABLE AS WELL AS INSIGHTS INTO INTERFACING HARDWARE TO THE A/D PORTS (8). THIS IS ONE OF THE EXCITING CIRCUITS WHICH ARE BEING DESIGNED FOR THE PROTO BOARD. I WILL HAVE THIS CIRCUIT AT BOTH THE PUG AND WP99 U.G. MEETINGS IN APRIL. YOU MAY WANT TO BRING A LITTLE EXTRA $30. TO THE MEETING TO GET YOUR BOARD AT THE MEMBERS PRICE. THAT IS IF SCOTT HAS ANY LEFT AFTER HIS TRIP TO THE BOSTON TI FAYAH. SCOTT WILL TRAVEL TO ALMOST ANYWHERE WITHIN A 600 MILE RADIUS OF PITTSBURGH IF THERE IS A CHANCE THAT SOMEONE WOULD BE INTERESTED IN THE BOARD. BEFORE THE BOARD, SCOTT WENT ANYWAY AND HAD A GOOD TIME.

SPEAKING OF FAIRS, THERE WILL BE A FAIR SPONSORED BY THE NETWORK OF USER GROUPS ASSOCIATION OF GREATER ERIE (NUAGE) THE RADIO SHACK LINE OF COMPUTERS, THE APPLE LINES, THE COMMODORE LINES, ATARI LINES, AND MOST IMPORTANTLY THE TI-99 AND GENEVE 9640 WILL ALL BE REPRESENTED ON SATURDAY MAY 7TH, 1988 AT THE PA. NATIONAL GUARD ARMORY 6TH AND PARADE, ERIE, PA CALL (814) 825-4790 OR WRITE: NUAGE % SPECTRUM ATARI GROUP OF ERIE, P.O. BOX 10562, ERIE, PA 16514-0562 .... THE FAIR IS FROM 10:00 AM TO 6:00 PM. ADMISSION IS 50¢ THIS FAIR IS NOT TOO FAR FOR PITTSBURGERS TO TRAVEL TO AND MAKE PERHAPS A NICE SPRING WEEKEND OF WITH THE FAMILY. MAYBE I'LL SEE YOU THERE.

WEST PENN 99'ERS

% JOHN F. WILLFORTH
R.D. # 1 BOX 73A
JEANNETTE, PA
15644

NEXT MEETING APRIL 19,1988

APRIL 88 ISSUE

EDMONTON 99'ers
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